IN THE CLAIMS

Claim 1-93. (Cancelled)

94. (Withdrawn) A composition comprising a reaction mixture comprising a complex of a bacterial RlmA protein, or an rRNA binding fragment thereof, and an rRNA that binds said protein.

95. (Withdrawn) The composition of claim 94, comprising an rRNA binding domain of said RlmA protein.

96. (Withdrawn) The composition of claim 94, further comprising a compound being tested for inhibitory activity against a bacterial strain.

97. (Withdrawn) The composition of claim 94, wherein the bacterial RlmA protein or the rRNA is detectably labeled.

98. (Currently Amended) A method of identifying compounds having inhibitory activity against a bacterial strain, comprising:

a) preparing a cell-free reaction system comprising a bacterial RlmA protein or a rRNA binding domain thereof, a rRNA that binds said bacterial RlmA protein or the rRNA binding domain thereof, and a candidate compound; and

b) detecting the extent of binding between the bacterial RlmA protein or the rRNA binding domain thereof and the rRNA, wherein reduced binding between the bacterial RlmA protein or the rRNA binding domain thereof and the rRNA in the presence of the compound relative to a control is indicative of inhibitory activity of the compound against the bacterial strain.

99. (Previously Presented) The method of claim 98, wherein the bacterial RlmA protein or rRNA binding domain thereof is immobilized on a solid support.

100. (Currently Amended) The method of claim 98, wherein the candidate compound is added to the reaction system prior to or simultaneously with the bacterial RlmA protein or the rRNA binding domain thereof and the rRNA, or wherein the candidate compound is added to the reaction system subsequent to addition of the bacterial RlmA protein or the rRNA binding domain thereof and the rRNA.

101. (Withdrawn) The method of claim 98, wherein the candidate compound is added to the reaction system subsequent to addition of the bacterial RlmA protein and the rRNA.

102. (Currently Amended) The method of claim 98, further comprising labeling the rRNA, bacterial RlmA protein or rRNA binding domain thereof with ~~the~~ a detectable label, prior to said detecting.

103. (Previously Presented) The method of claim 102, wherein the detectable label comprises an antibody or fragment thereof that binds the bacterial RlmA protein or rRNA binding domain thereof, or wherein the detectable label comprises an enzyme and the reaction system further comprises a substrate for the enzyme, or wherein the detectable label comprises a radioisotope, or wherein the detectable label comprises a fluorescent label, or

wherein the bacterial RlmA protein or rRNA binding fragment thereof is present in the reaction system as a fusion protein with glutathione-S-transferase.

104. (Withdrawn) The method of claim 102, wherein the detectable label comprises an enzyme and the reaction system further comprises a substrate for the enzyme.

105. (Withdrawn) The method of claim 102, wherein the detectable label comprises a radioisotope.

106. (Previously Presented) The method of claim 102, wherein the detectable label comprises a fluorescent label.

107. (Previously Presented) The method of claim 98, wherein said detecting is conducted via fluorescent resonance energy transfer, or wherein said detecting is conducted via fluorescence polarization anisotropy measurements.

108. (Previously Presented) The method of claim 98, wherein said detecting is conducted via fluorescence polarization anisotropy measurements.

109. (Withdrawn) The method of claim 98, wherein the bacterial RlmA protein or rRNA binding fragment thereof is present in the reaction system as a fusion protein with glutathione-S-transferase.

110. (Previously Presented) The method of claim 98, wherein the method of identification comprises a high throughput screening assay.

111. (Withdrawn) A method of identifying compounds having inhibitory activity against a bacterial strain, comprising:

a) preparing a reaction system comprising a bacterial RlmA protein of a bacterial strain or a rRNA binding domain thereof, a rRNA that binds said protein or binding domain thereof, and a candidate compound;

b) detecting extend of binding between the bacterial RlmA protein and the rRNA, wherein reduced binding between the bacterial RlmA protein and the rRNA in the presence of the compound relative to a control is indicative of inhibitory activity of the compound against the bacterial strain; and

c) determining extent of a compound identified in b) as having inhibitory activity to inhibit growth of a bacterial strain *in vitro*.

112. (Withdrawn) The method in claim 111, wherein the method of identifying compounds having inhibitory activity is selected from the group consisting of (a) NMR chemical shift perturbation, (b) gel filtration chromatography, or c) sedimentation equilibrium measurements using an analytical ultracentrifuge.

113. (Withdrawn) The method of claim 111, further comprising d) determining extent of a compound identified in c) as inhibiting growth of a bacterial strain *in vitro*, to inhibit replication of a bacterial strain in a non-human animal.

114 (New) The method of claim 98, comprising:

a) preparing a cell-free reaction system comprising the bacterial RlmA protein, the rRNA that binds said bacterial RlmA protein, and the candidate compound; and

b) detecting the extent of binding between the bacterial RlmA protein and the rRNA, wherein reduced binding between the bacterial RlmA protein in the presence of the compound relative to a control is indicative of inhibitory activity of the compound against the bacterial strain.

115. (New) The method of claim 98, wherein the rRNA binding domain of the bacterial RlmA protein comprises a methyltransferrase domain of the bacterial RlmA protein.

116. (New) The method of claim 98, wherein the bacteria is selected from the group consisting of *Escherichia coli*, *Salmonella typhimurium*, *Yersinia pestis*, *Vibrio cholerae*, *Pseudomonas putida*, *Pseudomonas aerug*inosa, *Streptomyces fradiae*, *Bacillus subtilis*, *Lactobacillus lactis*, and *Streptococcus pneumoniae*.